

IN THE CLAIMS:

The following listing of claims will replace all prior versions, and listings, of claims in the application.

1-34. (Canceled)

35. (Previously Presented) A computer-readable memory medium comprising program instructions executable to:

monitor accesses to chunks located on a plurality of storage devices, wherein each chunk comprises one or more file system clusters;

store data indicating a number of accesses to each chunk;

receive user input specifying a size N for a list of most frequently used chunks;

determine the list of N most frequently used chunks based on the data indicating the number of accesses to each chunk; and

balance the N most frequently used chunks across the plurality of storage devices.

36. (Currently Amended) A computer-readable memory medium comprising program instructions executable to:

receive user input specifying a chunk size, wherein the chunk size specifies a number of bytes;

monitor accesses to chunks of the specified chunk size located on [[the]] a plurality of storage devices;

store data indicating a number of accesses to each chunk;

determine a list of most frequently used chunks based on the data indicating the number of accesses to each chunk; and

balance the most frequently used chunks across the plurality of storage devices.

37. (New) The computer-readable memory medium of claim 35,

wherein the plurality of storage devices comprises a plurality of disks.

38. (New) The computer-readable memory medium of claim 35, wherein one or more volumes are stored on the plurality of storage devices; and wherein said monitoring accesses to chunks located on the storage devices comprises, for each volume, monitoring accesses to chunks located in the volume.

39. (New) The computer-readable memory medium of claim 35, wherein the program instructions are further executable to:

display a graphical user interface for controlling said monitoring; and receive user input to the graphical user interface requesting to start said monitoring;

wherein said monitoring accesses to chunks located on the storage devices is performed in response to the user input requesting to start said monitoring.

40. (New) The computer-readable memory medium of claim 35, wherein the program instructions are further executable to:

display a graphical user interface for setting properties of said monitoring; and receive user input to the graphical user interface specifying one or more properties of said monitoring;

wherein said monitoring accesses to chunks located on the storage devices is performed in accordance with the specified one or more properties.

41. (New) The computer-readable memory medium of claim 35, wherein said monitoring accesses to chunks located on the storage devices comprises one or more of:

monitoring read accesses to the chunks; and/or
monitoring write accesses to the chunks.

42. (New) The computer-readable memory medium of claim 35, wherein the program instructions are further executable to:

display information indicating the number of accesses to each chunk.

43. (New) The computer-readable memory medium of claim 35,
wherein said balancing the most frequently used chunks across the plurality of storage devices comprises, for each of at least a subset of chunks in the list of most frequently used chunks, relocating file system clusters in the chunk to a different storage device in the plurality of storage devices.

44. (New) The computer-readable memory medium of claim 35,
wherein said balancing the most frequently used chunks across the plurality of storage devices includes relocating a first file system cluster from a first storage device to a second storage device;

wherein the program instructions are further executable to determine a first location on the second storage device to which to relocate the first file system cluster;
wherein said relocating the first file system cluster from the first storage device to the second storage device comprises relocating the first file system cluster to the first location on the second storage device.

45. (New) The computer-readable memory medium of claim 44,
wherein said determining the first location on the second storage device to which to relocate the first file system cluster comprises determining a location on the second storage device at which the first file system cluster can be accessed rapidly.

46. (New) The computer-readable memory medium of claim 44,
wherein the second storage device comprises a disk;
wherein said determining the first location on the second storage device comprises determining a location near the center of the disk;
wherein said relocating the first file system cluster to the first location on the second storage device comprises relocating the first file system cluster to the location near the center of the disk.

47. (New) The computer-readable memory medium of claim 36,
wherein the plurality of storage devices comprises a plurality of disks.

48. (New) The computer-readable memory medium of claim 36,
wherein a plurality of volumes are stored on the plurality of storage devices;
wherein the program instructions are further executable to receive user input
specifying a chunk size for each volume;
wherein said monitoring accesses to chunks of the specified chunk size located on
the storage devices comprises, for each volume, monitoring accesses to chunks located in
the volume and having the specified chunk size for the volume.

49. (New) The computer-readable memory medium of claim 36,
wherein said monitoring accesses to chunks located on the storage devices
comprises one or more of:
monitoring read accesses to the chunks; and/or
monitoring write accesses to the chunks.

50. (New) The computer-readable memory medium of claim 36,
wherein said balancing the most frequently used chunks across the plurality of
storage devices comprises, for each of at least a subset of chunks in the list of most
frequently used chunks, relocating file system clusters in the chunk to a different storage
device in the plurality of storage devices.

51. (New) A system comprising:
one or more processors; and
a plurality of storage devices;
wherein the one or more processors are operable to execute program instructions
to:
monitor accesses to chunks located on the storage devices, wherein each
chunk comprises one or more file system clusters;
store data indicating a number of accesses to each chunk;
receive user input specifying a size N for a list of most frequently used
chunks;

determine the list of N most frequently used chunks based on the data indicating the number of accesses to each chunk; and

balance the N most frequently used chunks across the plurality of storage devices.

52. (New) The system of claim 51,

wherein the plurality of storage devices comprises a plurality of disks.

53. (New) The system of claim 51,

wherein one or more volumes are stored on the plurality of storage devices; and

wherein said monitoring accesses to chunks located on the storage devices comprises, for each volume, monitoring accesses to chunks located in the volume.

54. (New) The system of claim 51, wherein the one or more processors are further operable to execute the program instructions to:

display a graphical user interface for controlling said monitoring; and

receive user input to the graphical user interface requesting to start said monitoring;

wherein said monitoring accesses to chunks located on the storage devices is performed in response to the user input requesting to start said monitoring.

55. (New) The system of claim 51, wherein the one or more processors are further operable to execute the program instructions to:

display a graphical user interface for setting properties of said monitoring; and

receive user input to the graphical user interface specifying one or more properties of said monitoring;

wherein said monitoring accesses to chunks located on the storage devices is performed in accordance with the specified one or more properties.

56. (New) The system of claim 51,

wherein said monitoring accesses to chunks located on the storage devices comprises one or more of:

- monitoring read accesses to the chunks; and/or
- monitoring write accesses to the chunks.

57. (New) The system of claim 51,

wherein the one or more processors are further operable to execute the program instructions to display information indicating the number of accesses to each chunk.

58. (New) The system of claim 51,

wherein said balancing the most frequently used chunks across the plurality of storage devices comprises, for each of at least a subset of chunks in the list of most frequently used chunks, relocating file system clusters in the chunk to a different storage device in the plurality of storage devices.

59. (New) The system of claim 51,

wherein said balancing the most frequently used chunks across the plurality of storage devices includes relocating a first file system cluster from a first storage device to a second storage device;

wherein the one or more processors are further operable to execute the program instructions to determine a first location on the second storage device to which to relocate the first file system cluster;

wherein said relocating the first file system cluster from the first storage device to the second storage device comprises relocating the first file system cluster to the first location on the second storage device.

60. (New) A system comprising:

- one or more processors; and
- a plurality of storage devices;

wherein the one or more processors are operable to execute program instructions to:

receive user input specifying a chunk size, wherein the chunk size specifies a number of bytes;

monitor accesses to chunks of the specified chunk size located on a plurality of storage devices;

store data indicating a number of accesses to each chunk;

determine a list of most frequently used chunks based on the data indicating the number of accesses to each chunk; and

balance the most frequently used chunks across the plurality of storage devices.

61. (New) The system of claim 60,

wherein the plurality of storage devices comprises a plurality of disks.

62. (New) The system of claim 60,

wherein said monitoring accesses to chunks located on the storage devices comprises one or more of:

monitoring read accesses to the chunks; and/or

monitoring write accesses to the chunks.

63. (New) The system of claim 60,

wherein said balancing the most frequently used chunks across the plurality of storage devices comprises, for each of at least a subset of chunks in the list of most frequently used chunks, relocating file system clusters in the chunk to a different storage device in the plurality of storage devices.